

AMENDMENTS TO THE ABSTRACT

Please cancel the Abstract section of the specification and replace with the following:

A measuring device including a Hall sensor arranged in a centrally and axially movable manner in a magnetic tube. Each half of the magnetic tube includes a north and south pole that are diametrically opposed, wherein the north pole on the first half of the tube is also diametrically opposed to the north pole on the second half of the tube, and the south pole formed on the first half of the tube is also diametrically opposed to the south pole on the second half of the tube.